Las Vegas Fire & Rescue
General Notes

1. All work shall be done in strict accordance with the City of Las Vegas Fire Department's Ordinance # 5667, "Hydrant Specifications", and "Hydrant Installation Specification".

2. Authorized fire hydrants for this project are:
   A. Kennedy - Guardian models K81A and K81D
   B. Mueller - Super Centurion 250 model A-423
   C. Clow - Medallion model F-2546LVD
   D. U.S. Pipe - Metroflow/M-03
   E. Troy Valve - Patriot model PT8100N Nevada Hydrant

3. On any residential or commercial installations fire hydrants shall be installed and fire apparatus access roads shall be maintained ***before*** commencement of any combustible construction. All fire hydrants shall be in good working order and shall be capable of delivering the required fire flow.

4. To identify the fire hydrant locations, contractor shall place a blue reflective marker at the center line of street adjacent to the fire hydrants as required by Ordinance # 5667.

5. All underground inspections, pressure and flush verifications of all fire hydrants and fire lines, shall be conducted ***before*** covering the lines. Call the City of Las Vegas Inspection Hot-line at **229-2071** to request an inspection by the City of Las Vegas Fire Department.

6. Painting of the curbs and fire hydrants and all other work necessary as required by Ordinance # 5667, for the protection of fire hydrants from physical damage, shall be completed ***before*** approval by the City of Las Vegas Fire Department.

7. A permit is required from the City of Las Vegas Fire Department for the on-site water lines and fire hydrants. The permit and contractor's material and test certificate for underground piping form shall be obtained from the Fire Protection Engineer ***before*** commencement of work.

8. Private fire hydrants shall be painted red.

9. Prior to the final occupancy, a flow test must be witnessed by the City of Las Vegas Fire Department to verify availability of the required fire flow.

10. All on-site underground water mains and materials shall be U.L. listed, A.W.W.A. approved, and shall be rated for the appropriate working pressure.

11. Fire hydrants spacing shall be:
    Residential - 500 feet unsprinklered; 600 feet sprinklered.
    Commercial - 300 feet unsprinklered; 400 feet sprinklered.

12. Where new water mains are extended along streets or new streets are installed where fire hydrants are not needed for protection of the structures, fire hydrants shall be installed at maximum 1,000 foot spacing, to provide for transportation hazards. Where streets are provided with median dividers or have four or more traffic lanes and have a traffic count of more than 30,000 per day, hydrants are required on each side of the street spaced at 500 feet on an alternating basis.

13. No fire hydrants shall be located within the required radius of a cul-de-sac or within 20 feet of the perimeter of the radius of the cul-de-sac.

14. No fire hydrants shall be located within 6 feet of any curb return, driveway, power pole, streetlight or any other obstruction.

15. The maximum distance from a fire hydrant to a one-two family dwelling shall not exceed 300 feet, as measured by an approved route.

16. The maximum distance from a fire hydrant to a Fire Department Connection (FDC) shall not exceed 100 feet, as measured by an approved route.

17. The maximum distance from a fire hydrant to the end of a dead-end street shall not exceed 200 feet.

18. Two sources of supply are required whenever there are 4 or more fire hydrants/sprinkler lead-ins are installed on a single system. Sectional control valves shall be installed so that no more than 2 fire hydrants can be out of service due to a break in a water main.

19. All fire apparatus access roads shall be paved to provide all-weather driving capabilities, and shall be designed and maintained to support the imposed loads of the fire apparatus.

20. The gradient for the fire apparatus access roads shall not exceed 12%. Angles of approach and angles of departure shall not exceed 6% for 25 feet prior to or after the grade change. Adjacent to the structures gradient shall not exceed 6%.

21. The turning radius of the fire apparatus access roads shall be no less than 52 feet outside and 28 feet inside turning radius.

22. Vertical clearance of all fire apparatus access roads shall be not less than 13 feet 6 inches.

23. Fire department access roads in all **residential** developments (except for the apartment buildings) shall have a minimum unobstructed width of not less than 36 feet flow line to the flow line (this width may be reduced to 24 feet, if all buildings fronting the street are sprinklered) for main residential streets, with parking permitted on both sides of the street. Private drive aisles, driveways, etc. shall be allowed to be reduced to a minimum width of 24 feet wide flow line to the flow line when serving no more than 6 residences, and when on street parking is disallowed.

24. All fire apparatus access roads in **commercial** developments and **apartment complexes** shall have a minimum unobstructed width of not less than 24 feet (flow line to the flow line), provided no parking is allowed on either side; 32 feet (flow line to the flow line), if parallel parking is allowed on one side only; and 40 feet (flow line to the flow line), if parallel parking is allowed on both sides. These widths may be reduced by 4 feet if all buildings are sprinklered.

25. A fire department access road shall extend to within 50 feet of a single exterior door providing access to the interior of the building.

26. A fire apparatus access road shall be required when any portion of an exterior wall of the first story is located more than 150 feet from a fire department vehicle access. This distance could be increase to 250 feet if the building is sprinklered.

27. Approved secondary fire apparatus access shall be provided for 100 or more dwelling units, road(s) with dead-ends or with a single point of access in excess of 600 feet, and for all commercial, industrial, and multi-family residential developments.

28. All dead-end fire apparatus access roads and or fire lanes, public or private, in excess of 150 feet in length shall be provided with an approved turn around area having a minimum diameter of 81 feet.

29. All fire apparatus access roads shall be marked by placing approved signs at the start of the designated fire lane, one sign at the end of the fire lane and with signs at intervals 100 feet along all designated fire lanes. Signs to be placed on both sides of an access roadway if needed to prevent parking on either side. Signs to be installed no higher than 10 feet or less than 6 feet from roadway level. The curb along or on the pavement or cement if a curb is not provided shall be painted with a red weather resistant paint in addition to the signs.

30. Electrically controlled access gates shall be provided with an approved emergency vehicle detector/receiver system. Said system shall be installed in accordance with the City of Las Vegas guidelines for Automatic Emergency Vehicle Access Gates.

These requirements can also be downloaded at http://www.ci.las-vegas.nv.us/fire-rescue/5436_3001.htm .